Monitoring and Evaluation of Supply Chain

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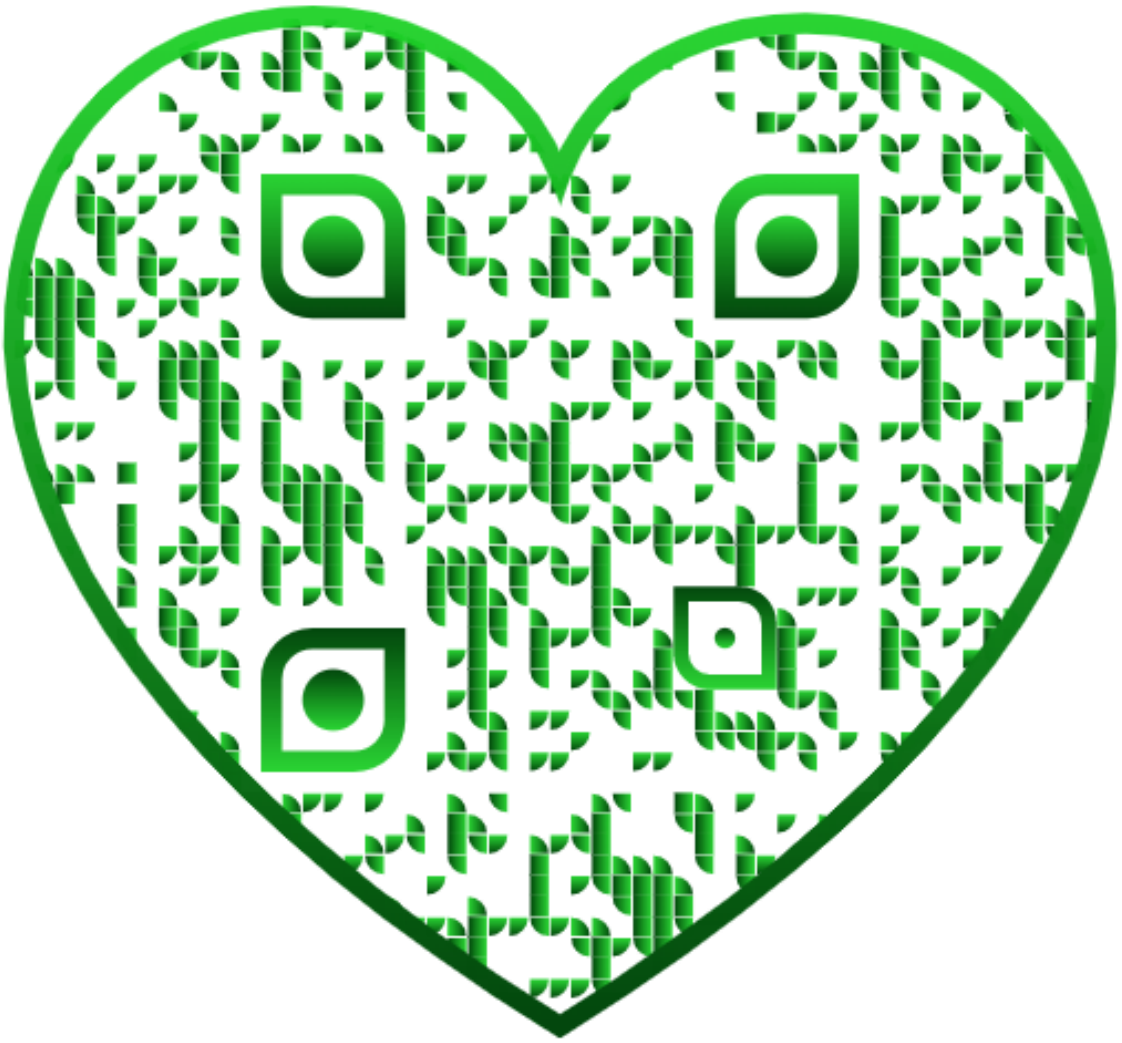


Learning Objectives

- At the end of the lesson students will be able to:
  - Define monitoring and evaluation
  - To identify benefits and purpose of M and E
  - Describe the framework and differences of M and E
  - Describe the type and processes of evaluations
  - Tools to investigate supply chain practice and performance
  - Tools to investigate medicine use practice and performance
  - Data collection methods

Monitoring and Evaluation

- Integral part of PSCM
- Provide a link b/n planning and implementation
- It is a process of continued gathering of information and its analysis,
  - To determine whether progress is being made towards pre-specified goals and objectives, and highlight whether there are any unintended (positive or negative) effects from a project/program and its activities

Monitoring

- **Routine/continuous assessment of information or indicators** of **ongoing activities**
- Focuses on tracking program inputs such as funding, staff, facilities, supplies…
- It is a continuous process of collecting, analyzing, documenting, and reporting information on progress to achieve set project objectives.
- It helps identify trends and patterns, adapt strategies and inform decisions for project or program management

Monitoring …

- It allows corrective action during program implementation
  - ***Routine tracking* of key elements of program performance**
    - Seeks to understand what is happening as the project progresses in order to keep it on track

Why monitor activities?

- Seeks to understand what is happening as the project progresses
- Identifies and addresses problems
- Ensures effective use of resources
- Ensures quality and learning to improve activities and services
- Strengthens accountability
- Program management tool

Designing monitoring system: Monitoring methods

- Information required for monitoring can be obtained through a combination of four formal and informal methods
- **A practical strategy for developing monitoring:**
  - ♠ Use supervisory visit
  - ♠ Establish a streamlined routine reporting system
  - ♠ Identify sentinel sites
  - ♠ Plan and conduct special studies
    - Not available through routine reporting or sentinel sites

Designing monitoring system…

- The principles for designing a monitoring system are to;
  - Focus on key monitoring questions and indicators; keep data collection to a minimum
  - Develop practical procedures for managing monitoring information; and
  - Make comparisons between performance of similar programs, performance of different facilities within the program, and performance over time.
- Design should also consider how information will be available for timely feedback and follow-up action

Designing monitoring system…

- The «KISS" concept should be applied: keep it simple and straightforward (or keep it short and simple).
  - 1. Create and follow a clear coding guide
  - 2. Avoid using multiple third-party tools
  - 3. Streamline (well-define) the review process

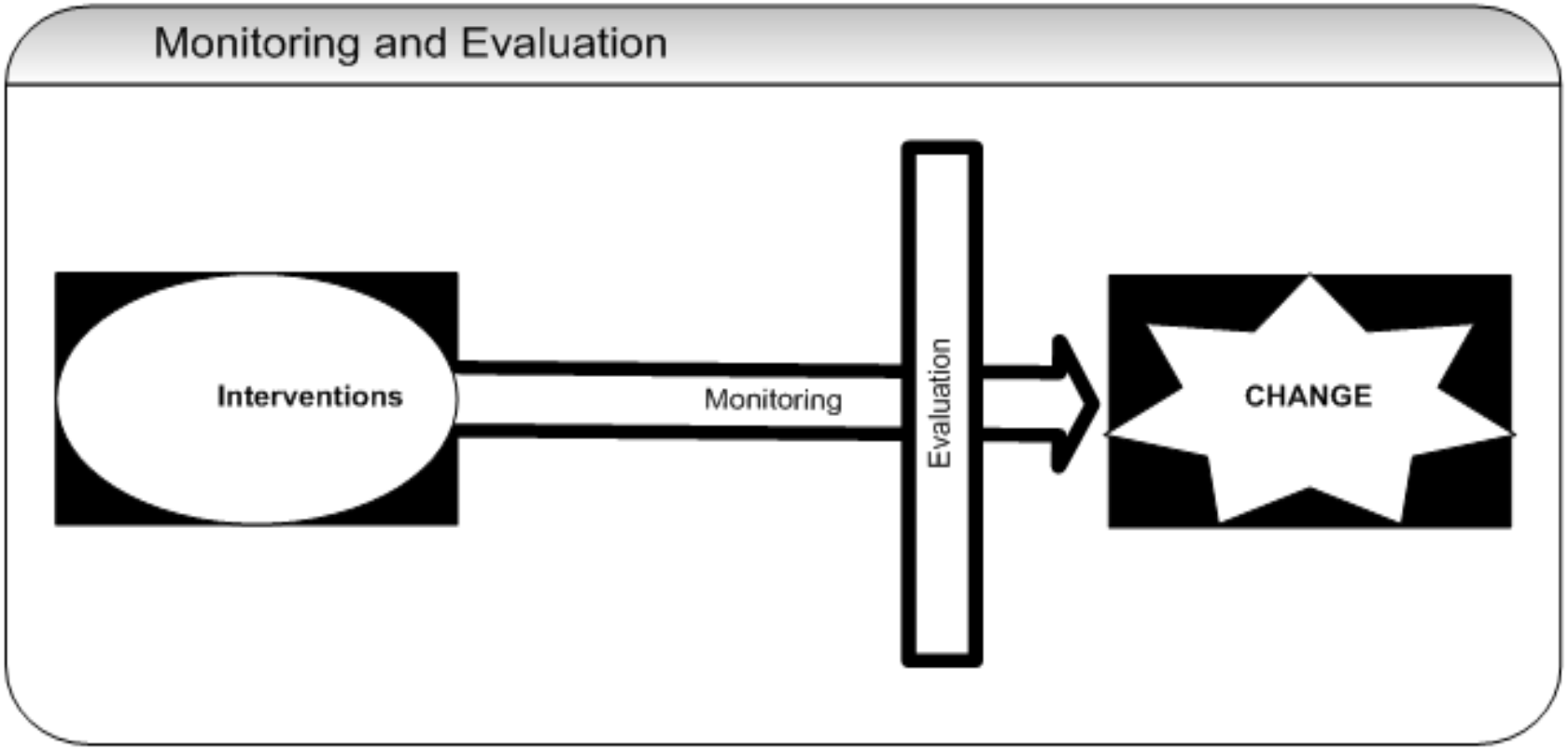
Evaluation

- Assessment of the project **at one point in time**, including the successes and failures
- **Periodic/episodic** assessment of **overall achievements** and **impacts**
- Analysing progress towards meeting established **objectives, goals or results**
- Involves gathering, analyzing, interpreting and reporting information based on credible data.
- Answers the question, “what have we achieved and why and what impact have we made”
- The aim is to determine the relevance and fulfillment of objectives, developmental efficiency, effectiveness, impact and sustainability

Why evaluate activities?

- Determines program effectiveness
- Shows impact
- Strengthens financial responses and accountability
- Promotes a learning culture focused on service improvement
- Promotes replication of successful interventions

M and E Cont'd


Monitoring and Evaluation
Interventions
Monitoring
Evaluation
CHANGE

M and E Cont'd

- **Together, Monitoring and Evaluation tell us:**
  - Where we are now
  - Where we are likely to go in future
  - Extent to which programme goals and objectives are being achieved or are likely to be achieved in future
  - How programme performance can be improved
  - Whether the programme is worth implementing
  - Provide reasons for success or failure

Differences between M and E

Monitoring:

- Continuous: day-to-day
- **Documents progress**
- **Focuses on inputs and outputs**
- Self assessment/internal process
- Answers the question "what"
- **Alerts managers to problems**

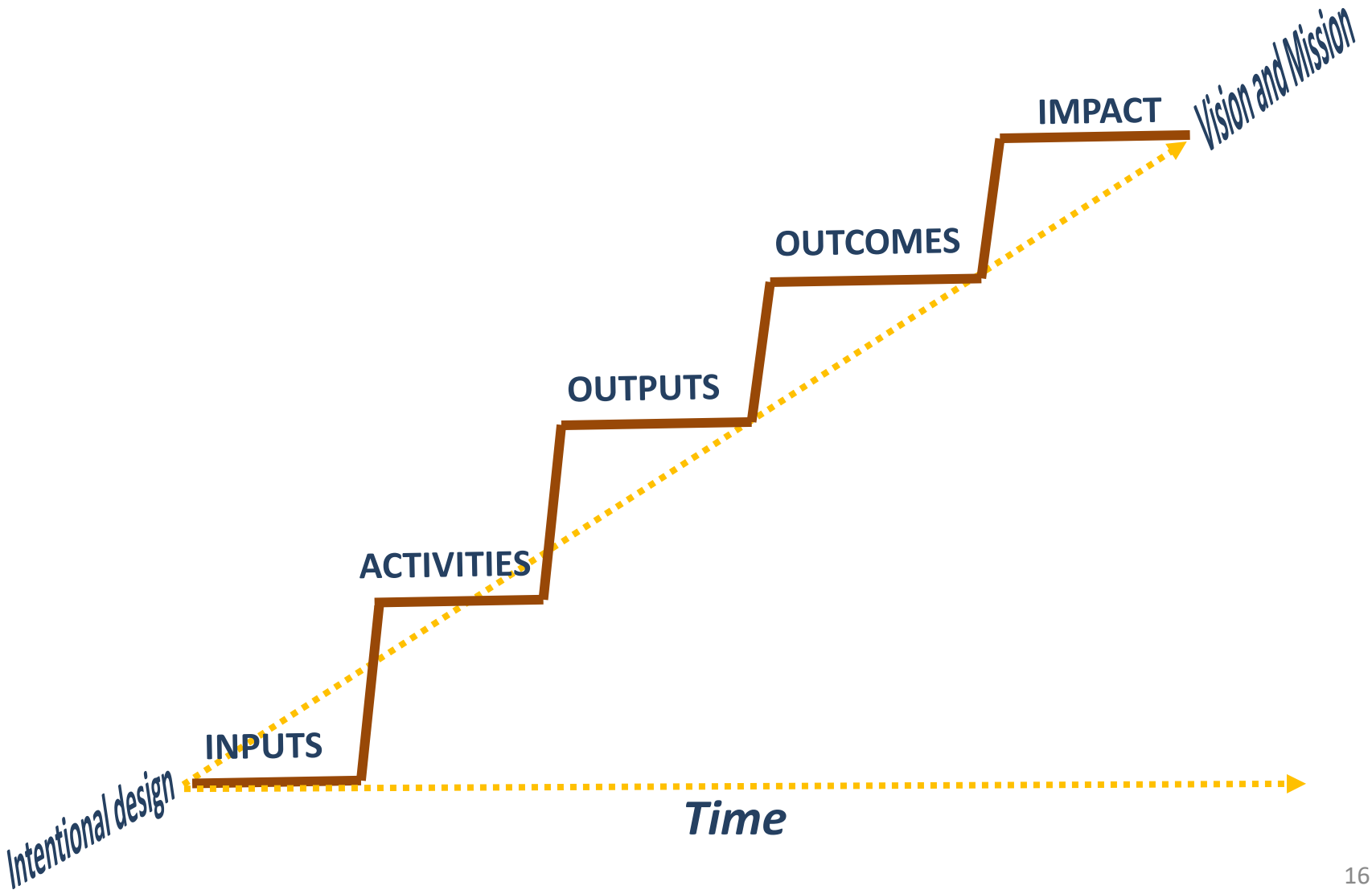
Evaluation:

- Periodic: a "snapshot"
- **In-depth analysis of achievements**
- **Focuses on outcomes & impacts**
- External analysis
- Answers the question "why" (cause-effects linkages)
- **Provides managers with strategy and policy options**

M&E Framework

Level	Description	Frequency
Inputs	• Resources that are put into the project. • Lead to the achievement of the outputs	Continuous
Outputs	• Activities or services that the project is providing. • Outputs lead to outcomes	Quarterly
Outcomes	• Changes in behaviors or skills as a result of the implemented project. • Outcomes are anticipated to lead to impacts	2-3 years (short to medium term)
Impacts	Measurable changes in health status, e.g. reduced STI/HIV transmission and reduced AIDS impact. Impact results are effects of the intervention	3-5 years (long term)

M and E Framework Cont'd



Type and Processes of Evaluation

- **Based on time and purpose**
  1. Need Assessment/Situation Analysis(Ex-ante Evaluation)
  2. Mid Term /Formative Evaluation
  3. Summative/Final Evaluation (Ex-Post Evaluation)
- **Based on position of evaluator**
  1. External evaluation
  2. Internal evaluation or self-assessment
- **By methodology employed**
  1. Quantitative
  2. Qualitative

Situation Analysis (SA)

- Conducted before the implementation of a project as part of the planning
  - **During design and concept phase**
- Initial assessment of the target populations and contextual environment (Assess current situation)
  - Also referred to as appraisal or quality at entry
- Provide information to define objectives and strategies for a program
- Acquire baseline for comparison

Situation Analysis (SA) Cont'd

- Characteristics of Good indicators: **Attribute of selected indicators: "SMART"**
  - **Specific:** Focused and clear
    - The performance target is dearly written to avoid different interpretations
  - **Measurable:** Quantifiable and reflecting change
  - **Achievable:** Reasonable in scope and achievable within set time-frame
  - **Realistic:** Pertinent to the review of performance and the target is achievable within the time allowed
  - **Time bound:** Progress can be charted chronologically

Selecting indicators

- In selecting indicators, carefully consider how data will be collected is also important and the sources and the cost of collecting and processing data
- Five necessary criteria for selecting appropriate performance indicators
  - **Clarity**: the indicator is easily understood and calculated
  - **Usefulness**: the indicator reflects an important aspect of performance
  - **Measurability:** the indicator can be defined in quantitative terms and used within existing constraints on information quality and availability
  - **Reliability**: the indicator permits consistent assessment over time and among different observers.

Methods For Situational Analysis

- ✓ Literature review
- ✓ Discussion of beneficiaries and partners
- ✓ FGD's
- ✓ Interviews and surveys
- ✓ Participants observations

Mid Term Evaluation (MDE)

- ✓ Conducted half way the life of project/programme
  - **Implementation**

Mid Term Evaluation (MDE) Cont'd

- A review of the project/program to assess
  - Progress
  - Sufficiency of interventions and budgets towards results
  - Identification of barriers to achievement
  - Identify opportunities, unanticipated accomplishment or innovation
- Provides information for program improvement, modification, documentation and management
- Provides feedback to improve program effectiveness before the end of the project.

Methods For MDE

1. Records review
2. Review monitoring reports
3. Key informant interviews
4. Direct observation
5. Surveys

Final Evaluation

- Conducted after the project is completed
- Provide evidence to support judgment of the project's worth
- Used in decisions about the merits of continuing the project or program

Final Evaluation Cont'd

- Assess program/project outputs, outcome impact
- Assess the why of positive and negative results
- Assess how well needs of various customers were met
- Identify and analyze unintended consequences
- Examine sustainability of results
- Recommend future action

Methods For Final Evaluation

1. Records review
2. Review of monitoring reports
3. Key informants interviews
4. Focus Group Discussions (FGD's)
5. Direct observations
6. Surveys

Based on Position of Evaluator

- **External Evaluation**
  - Initiated and controlled by the external body e.g. donor as part of contractual agreement
  - Conducted by independent people – who are not involved in implementation
  - Often guided by project staff

Position of Evaluator…

- **Internal or Self Assessment**
  - Internally guided reflective processes
  - Initiated and controlled by the group for its own learning and improvement
  - Sometimes done by consultants who are outsiders to the project
  - Need to clarify ownership of information before the review starts

Some common pitfalls in M& E

- Failure to identify the basic questions
- Over ambitiousness
- Complexity
- Lack of integration with planning and implementation
- Failure to build on an existing system
- Inadequate resources
- Lack of objectivity
- Jumping to wrong conclusion
- Lack of comparison data

Tools to investigate medicine use practice and performance

- **WHO Medicine/Drug Use Indicators**
  - Intended to measure aspects of health provider behavior in primary health-care facilities in a reliable way, irrespective of who collects the data
  - The indicators provide information to health-care managers concerning medicines, prescribing habits and important aspects of patient care.

WHO Medicine/Drug Use Indicators….

- All the indicators have been extensively field-tested in many countries and
- They are found to be relevant, easily generated, measured, valid, consistent, reliable, representative, sensitive to change, understandable, and action oriented.
- The standardized drug use indicators were developed jointly by WHO and International Network for Rational Use of Drugs (INRUD) after a study conducted in many countries (WHO, 1993).

WHO Medicine/Drug Use Indicators….

- These indicators are classified into two main classes
  - **Core Drug Use Indicators (12):**
    - These are highly standardized;
    - They don't need national adaptation and they are recommended for inclusion in any drug/medicine use study.
  - **Supplementary Drug Use Indicators (7):**
    - These are not standardized;
      - They need national adaptation

WHO/Drug Use Indicators…

- **Core drug use indicators**
  - Further classified into three:
    - **1. Prescribing Indicators**
    - **2. Patient Care Indicators**
    - **3. Health Facility Indicators**

WHO/Drug Use Indicators…

1. **Prescribing indicators:** Retrospective or prospective
   a) Average number of drugs per encounter
   b) %ge of drugs prescribed by generic name
   c) %ge of encounters with antibiotic prescribed
   d) %ge of encounters with injection prescribed
   e) %ge of drugs prescribed from EDL or formulary

WHO/Drug Use Indicators…

2. **Patient care indicators:** Prospective data
   a) Average consultation time
   b) Average dispensing time
   c) Percentage of drugs actually dispensed
   d) Percentage of drugs adequately labeled
   e) Patients knowledge of correct dosage

WHO/Drug Use Indicators…

3. **Health facility indicator:** Prospective data

   a) Availability of a copy of EDL or formulary

   b) Availability of key essential drugs

Complementary Indicators

a) Prescription in accordance of treatment guidelines

b) %ge of patients satisfied with the care they receive

c) %ge of health facilities with access to impartial drug information

d) %ge of patients treated without drugs

e) Average drug cost per encounter

f) Percentage of drug cost spent on antibiotics

g) Percentage of drug cost spent on injection

Investigating Drug Use Problems: Qualitative Methods

- Qualitative methods/techniques/ are better suited examine the feeling attitudes or motivations that underlie an observed problem
- They are helpful in exploring the cause of a problem, constraints to changes in behavior, and opportunities for correcting a problem

Investigating Drug Use Problems: Qualitative Methods…

- Common qualitative tools includes;
  - Focus group discussion
  - In-depth interview
  - Structured observation
  - Simulated patient survey

Common tools for qualitative techniques

Focus group discussion

- 1.5 to 2-hour discussion
- guided by trained moderator
- group of 6 to 10 similar respondents (age, gender, social status)
- focus on defined list of topics
- informal setting
- reveals beliefs, opinions, motives

In-depth interview

- semistructured extended interview with respondent
- interviewer uses predefined open-ended questions
- usually covers 10 to 30 topics
- reveals attitudes, beliefs, knowledge

Common tools for qualitative techniques…

Structured observation
- systematic observation of verbal and nonverbal behavior
- usually patient-provider interactions
- trained observers use structured recording form
- assesses actual behavior

Questionnaire
- fixed set of standardized questions
- large sample of respondents
- respondents systematically selected to represent a larger population
- quantifies frequency of attitudes, beliefs, knowledge

Simulated patient survey
- someone (the "simulated patient") poses as a patient or a relative of a patient
- simulated patient seeks care for specific health problem
- questions, advice, actions of health care provider recorded after encounter
- assesses actual behavior in a standardized way

Comparison of qualitative tools

Table 28-4 Comparison of qualitative methods

Method	Key points	Strengths	Weaknesses
Focus group discussion	• Small; equal participation • Homogeneous; shared point of view • Informal; free interaction and open sharing of ideas • Recorded; analysis at later time possible	• Good at eliciting the beliefs and opinions of a group • Richness and depth • Easy and inexpensive to organize	• Need for skilled moderator • Beliefs and opinions expressed may not represent true feelings • Potential bias in analysis
In-depth interview	• Open-ended and in-depth questions • Targets key informants or opinion leaders • Five to ten interviews; enough to explore important issues • If target group is diverse, five to ten held with each subgroup	• Unexpected insights or new ideas • Creation of trust between interviewer and respondent • Less intrusive than questionnaire • Useful with nonliterate respondents	• Time-consuming compared to questionnaires • Data analysis can be difficult • Bias toward social acceptability • Need for well-trained interviewers
Structured observation	• Data can be coded indicators or scales, list of events or behaviors, or diaries • To count frequency of behaviors, at least thirty cases per group • To understand typical features, a few cases in five or six settings may be enough	• Best way to study provider-patient interactions, including patient demand, quality of communication, or interaction time • Opportunity to learn about provider behavior in its natural setting	• Threatening to those observed • Observers must spend enough time to "blend in" • Behavior may not be natural • Need for skilled, patient observers • Not useful for rare behaviors
Questionnaire	• Fixed or open-ended responses • Sample size depends on sampling method, desired accuracy, and available resources • At least fifty to seventy-five respondents from each subgroup	• Best method to study range of knowledge, beliefs, opinions, population characteristics • Familiar to managers and respondents • Required skills often locally available	• Attitudes difficult to quantify • Respondents may answer questions even if none apply • Results sensitive to specific questions and wording • Large surveys can be expensive
Simulated patient survey	• Details of the condition are standardized • Simulated patient purchases what is recommended • Each facility should be visited by at least five simulated patients • At least twenty facilities should be visited	• Useful to compare knowledge and practices • Identification of different practices for rich/poor, male/female, rural/urban	• Ethical issues • Need for simulators who can speak local language and are credible purchasers in the setting

Conclusion: Why M&E?

- M&E should be part of the design of a program
- Ensures systematic reporting
- Communicates results and accountability
- Measures efficiency and effectiveness
- Provides information for improved decision making
- Ensures effective allocation of resources
- Promotes continuous learning and improvement

Thank You !!!